

REMARKS

I.      *Status Summary*

Claims 1, 7, 8 and 12-14 are pending in the subject application. Claims 7, 8 and 12 have been withdrawn pursuant to a Restriction/Election Requirement issued by the U.S. Patent and Trademark Office (hereinafter "the Patent Office"). Claims 1, 13 and 14 presently stand rejected.

Claims 1, 13 and 14 have been rejected under 35 U.S.C. § 112, first paragraph, upon the contention that the claims fail to comply with the written description requirement.

Claims 1, 13 and 14 have been rejected under 35 U.S.C. § 112, first paragraph, upon the contention that the claims fail to comply with the enablement requirement.

Claim 14 has been cancelled. Claims 1 and 13 have been amended. Support for the amendments can be found throughout the specification as originally filed, and in particular at page 2, line 15, through page 3, line 25; page 3, lines 26-32; page 15, line 15, through page 16, line 22; page 16, line 22, through page 17, line 19; page 17, line 20, through page 18, line 23; page 20, lines 15-16; and in Figure 5. No new matter has been added.

Reconsideration of the application based on the amendments and arguments set forth herein is respectfully requested.

II.     *Interview Summary*

Applicants conducted a Telephonic Interview with Examiner Jennifer Dunston on November 16, 2010. Participating in the Telephonic Interview with Examiner Dunton were applicants' attorney of record, Arles A. Taylor, Jr., and patent agent Leon R. Legleiter. Applicants sincerely appreciate Examiner Dunston's time and consideration in agreeing to and participating in the Telephonic Interview.

During the Telephonic Interview, the outstanding rejections of claims 1, 13 and 14 under 35 U.S.C. § 112, first paragraph, were discussed. Applicants also

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discussed proposed claim amendments to obviate the 35 U.S.C. § 112, first paragraph rejections. Examiner Dunston was receptive to the proposed claim amendments and suggested that they will likely obviate the 35 U.S.C. § 112, first paragraph rejections. Applicants respectfully submit that the Amendments and Remarks presented herein are believed to be consistent with their understanding of Examiner Dunston's position as presented during the Telephonic Interview.

III. Response to the Written Description Rejection under  
35 U.S.C. § 112, First Paragraph

Claims 1, 13 and 14 have been rejected under 35 U.S.C. § 112, first paragraph, upon the contention that the claims fail to comply with the written description requirement. The Patent Office contends that the claims amended in Amendment D filed on June 16, 2010 include new matter. Specifically, the Patent Office contends that the specification does not provide support for a "drug agent" comprising a dimer of ZHX3 and ZHX1 as currently recited in claims 1, 13 and 14.

After careful consideration of the rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, without acquiescing to the contentions of the Patent Office and in an effort to advance prosecution, applicants respectfully submit that claim 14 has been cancelled. As such, the instant rejection is believed to be moot with respect to claim 14.

Moreover, without acquiescing to the contentions of the Patent Office, applicants respectfully submit that claims 1 and 13 have been amended herein. Applicants respectfully submit that these amendments are believed to be consistent with those discussed during the November 16, 2010, telephonic interview with Examiner Dunston. Consistent with their understanding of Examiner Dunston's position during the telephonic interview, applicants respectfully submit that the amendments are believed to be address the instant rejection under 35 U.S.C. § 112,

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first paragraph, upon the contention that the claims fail to comply with the written description requirement.

Support for the amendments can be found throughout the specification as originally filed, and in particular at page 2, line 15, through page 3, line 25; page 3, lines 26-32; page 15, line 15, through page 16, line 22; page 16, line 22, through page 17, line 19; page 17, line 20, through page 18, line 23; page 20, lines 15-16; and in Figure 5. No new matter has been added.

To elaborate, at page 2, line 15, through page 3, line 25, the specification describes the discovery, isolation and sequencing of ZHX3 (SEQ ID NO: 1), and comparison to ZHX1. It is also noted that ZHX3 and ZHX1 function as dimers.

At page 16, line 22, through page 17, line 19, the specification describes the mapping of hetero-dimerization domains between ZHX1 and ZHX3. Such mapping experiments required the isolation of ZHX1 and ZHX3 separately, followed by combining the two proteins to allow for dimerization. The ZHX1-ZHX3 heterodimers were subsequently isolated to facilitate mapping of the hetero-dimerization domains.

Further, at page 17, line 20, through page 18, line 1, the specification describes experiments designed to verify the dimerization of ZHX1 and ZHX3, where isolated full-length ZHX1 and ZHX3 were allowed to dimerize, and the isolated dimers were detected via GST pull-down assays. See also Figure 5.

Taken together, applicants respectfully submit that the specification is believed to adequately support the present claim amendments. No new matter has been added. The claims are therefore believed to be in compliance with 35 U.S.C. § 112, first paragraph.

Accordingly, applicants respectfully request that the instant rejection under 35 U.S.C. § 112, first paragraph, be withdrawn. Claims 1 and 13 are believed to be in condition for allowance. A Notice of Allowance is therefore respectfully requested.

IV. Response to the Enablement Rejection under  
35 U.S.C. § 112, First Paragraph

Claims 1, 13 and 14 have been rejected under 35 U.S.C. § 112, first paragraph, upon the contention that the claims fail to comply with the enablement requirement. The Patent Office contends that the specification fails to enable one of ordinary skill in the art to make or use the claimed drug agent comprising a dimer of ZHX3 and ZHX1 as an effective component.

After careful consideration of the rejection and the Patent Office's basis therefore, applicants respectfully traverse the rejection and submit the following remarks.

Initially, without acquiescing to the contentions of the Patent Office and in an effort to advance prosecution, applicants respectfully submit that claim 14 has been cancelled. As such, the instant rejection is believed to be moot with respect to claim 14.

Moreover, without acquiescing to the contentions of the Patent Office, applicants respectfully submit that claims 1 and 13 have been amended herein. Applicants respectfully submit that these amendments are believed to be consistent with those discussed during the November 16, 2010, telephonic interview with Examiner Dunston. Consistent with their understanding of Examiner Dunston's position during the telephonic interview, applicants respectfully submit that the amendments are believed to be address the instant rejection under 35 U.S.C. § 112, first paragraph, upon the contention that the claims fail to comply with the enablement requirement.

By way of example and not limitation, the claimed dimer of ZHX1 and ZHX3 can be employed as a transcriptional regulator in a cell. As such, the present claims are believed to provide an enabled use and are believed to be in compliance with the enablement requirement of 35 U.S.C. § 112, first paragraph.

Support for the amendments can be found throughout the specification as originally filed, and in particular at page 2, line 15, through page 3, line 25; page 3,

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lines 26-32; page 15, line 15, through page 16, line 22; page 16, line 22, through page 17, line 19; page 17, line 20, through page 18, line 23; page 20, lines 15-16; and in Figure 5. No new matter has been added.

To elaborate, at page 2, line 15, through page 3, line 25, the specification describes the discovery, isolation and sequencing of ZHX3 (SEQ ID NO: 1), and comparison to ZHX1. It is also noted that ZHX3 and ZHX1 function as dimers.

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Taken together, applicants respectfully submit that the specification is believed to adequately support the present claim amendments. No new matter has been added. The claims are therefore believed to be in compliance with 35 U.S.C. § 112, first paragraph.

Accordingly, applicants respectfully request that the instant rejection under 35 U.S.C. § 112, first paragraph, be withdrawn. Claims 1 and 13 are believed to be in condition for allowance. A Notice of Allowance is therefore respectfully requested.

#### CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully

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requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any additional fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON, TAYLOR, & HUNT, P.A.

Date: 12/16/2010

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